

# DECLARATION FOR PATENT APPLICATION

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below adjacent to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of subject matter (process, machine, manufacture, or composition of matter, or an improvement thereof) which is claimed and for which a patent is sought by way of the application entitled

## METHODS FOR IDENTIFYING NON-VOLATILE MEMORY ELEMENTS WITH POOR SUBTHRESHOLD SLOPE OR WEAK TRANSCONDUCTANCE

- which (check) ☒ is attached hereto.
- ☐ and is amended by the Preliminary Amendment attached hereto.
- ☐ was filed on \_\_\_\_\_ as Application Serial No. \_\_\_\_\_
- ☐ and was amended on \_\_\_\_\_ (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information, which is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, § 119(a)-(d) of any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America listed below and have also identified below any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) of which priority is claimed:

| Prior Foreign Application(s) |         |                      | Priority Claimed         |                          |
|------------------------------|---------|----------------------|--------------------------|--------------------------|
| Number                       | Country | Day/Month/Year Filed | Yes                      | No                       |
| N/A                          |         |                      | <input type="checkbox"/> | <input type="checkbox"/> |

I hereby claim the benefit under Title 35, United States Code, § 119(e) of any United States provisional application(s) listed below:

| Provisional Application Number | Filing Date |
|--------------------------------|-------------|
| N/A                            |             |

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s) or PCT international application(s) designating the United States of America listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior application(s) in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose information, which is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56, which became available between the filing date of the prior application(s) and the national or PCT international filing date of this application:

| Application Serial No. | Filing Date | Status (patented, pending, abandoned) |
|------------------------|-------------|---------------------------------------|
| N/A                    |             |                                       |

I declare that all statements made herein of my own knowledge are true, all statements made herein on information and belief are believed to be true, and all statements made herein are made with the knowledge that whoever, in any matter within the jurisdiction of the Patent and Trademark Office, knowingly and willfully falsifies, conceals, or covers up by any trick, scheme, or device a material fact, or makes any false, fictitious or fraudulent statements or representations, or makes or uses any false writing or document knowing the same to contain any false, fictitious or fraudulent statement or entry, shall be subject to the penalties including fine or imprisonment or both as set forth under 18 U.S.C. 1001, and that violations of this paragraph may jeopardize the validity of the application or this document, or the validity or enforceability of any patent, trademark registration, or certificate resulting therefrom.

Full name of sole (or joint) inventor: Jeffrey W. Lutze

Inventor's Signature: Jeffrey W. Lutze

Date: 8/19/03

Residence: 1906 Adele Place  
San Jose, CA 95125

Post Office Address: same as above

Citizenship: U.S.A.

Full name of sole (or joint) inventor: Jian Chen

Inventor's Signature: Jian Chen

Date: 8/21/03

Residence: 5476 Castle Glen Avenue  
San Jose, CA 95129

Post Office Address: same as above

Citizenship: U.S.A.

Full name of sole (or joint) inventor: Yan Li

Inventor's Signature: Yan Li

Date: 8/21/03

Residence: 1775 Milmont Drive, Apt. M201  
Milpitas, CA 95035

Post Office Address: same as above

Citizenship: U.S.A.

Full name of sole (or joint) inventor: Kazunori Kanebako

Inventor's Signature: Kazunori Kanebako

Date: \_\_\_\_\_

Residence: 6-1-13-102, Kounandai, Kounan-Ku,  
Yokohama 234-0054, Japan

Post Office Address: same as above

Citizenship: Japan

Full name of sole (or joint) inventor: Tomoharu Tanaka

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Residence: 2-13-21-105, Ookubo, Kounan-ku  
Yokohama, Japan

Post Office Address: \_\_\_\_\_ Citizenship: Japan

# DECLARATION FOR PATENT APPLICATION

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## METHODS FOR IDENTIFYING NON-VOLATILE MEMORY ELEMENTS WITH POOR SUBTHRESHOLD SLOPE OR WEAK TRANSCONDUCTANCE

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☐ and is amended by the Preliminary Amendment attached hereto.  
☐ was filed on      as Application Serial No.        
☐ and was amended on      (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

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| Prior Foreign Application(s) |         |                      | Priority Claimed         |                          |
|------------------------------|---------|----------------------|--------------------------|--------------------------|
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| N/A                          |         |                      | <input type="checkbox"/> | <input type="checkbox"/> |

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| Provisional Application Number | Filing Date |
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| Application Serial No. | Filing Date | Status (patented, pending, abandoned) |
|------------------------|-------------|---------------------------------------|
| N/A                    |             |                                       |

I declare that all statements made herein of my own knowledge are true, all statements made herein on information and belief are believed to be true, and all statements made herein are made with the knowledge that whoever, in any matter within the jurisdiction of the Patent and Trademark Office, knowingly and willfully falsifies, conceals, or covers up by any trick, scheme, or device a material fact, or makes any false, fictitious or fraudulent statements or representations, or makes or uses any false writing or document knowing the same to contain any false, fictitious or fraudulent statement or entry, shall be subject to the penalties including fine or imprisonment or both as set forth under 18 U.S.C. 1001, and that violations of this paragraph may jeopardize the validity of the application or this document, or the validity or enforceability of any patent, trademark registration, or certificate resulting therefrom.

Full name of sole (or joint) inventor: Jeffrey W. Lutze

Inventor's Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Residence: 1906 Adele Place  
San Jose, CA 95125

Post Office Address: same as above

Citizenship: U.S.A.

Full name of sole (or joint) inventor: Jian Chen

Inventor's Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Residence: 5476 Castle Glen Avenue  
San Jose, CA 95129

Post Office Address: same as above

Citizenship: U.S.A.

Full name of sole (or joint) inventor: Yan Li

Inventor's Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Residence: 1775 Milmont Drive, Apt. M201  
Milpitas, CA 95035

Post Office Address: same as above

Citizenship: U.S.A.

Full name of sole (or joint) inventor: Kazunori Kanebako

Inventor's Signature: Kazunori Kanebako

Date: Sept. 1, 2003

Residence: 6-1-13-102, Kounandai, Kounan-Ku,  
Yokohama 234-0054, Japan

Post Office Address: same as above

Citizenship: Japan

Full name of sole (or joint) inventor: Tomoharu Tanaka

Inventor's Signature: 

Date: August 25, 2003

Residence: 2-13-21-105, Ookubo, Kounan-ku  
Yokohama, Japan

Post Office Address:

Citizenship: Japan

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Jeffrey W. Lutze, Jian Chen, Yan Li, Kazunori Kanebako, Tomoharu Tanaka

Assignee: SanDisk Corporation and Kabushiki Kaisha Toshiba

Title: METHODS FOR IDENTIFYING NON-VOLATILE MEMORY ELEMENTS WITH POOR SUBTHRESHOLD SLOPE OR WEAK TRANSCONDUCTANCE

Application No.: Unassigned

Filing Date: Herewith

Examiner: Unassigned

Group Art Unit: Unassigned

Docket No.: SNDK.301US0

Conf. No.: Unassigned

COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, VA 22313-1450

**POWER OF ATTORNEY BY ASSIGNEE**

Sir:

The above-identified assignee, SanDisk Corporation, a Delaware corporation, who has been assigned an interest in the patent application identified above, hereby appoints the attorney and identified by the following Customer Number to prosecute the above-identified application and to transact all business in the United States Patent and Trademark Office in connection therewith:

Customer Number 36257

Please direct all telephone calls to:

Michael G. Cleveland  
Telephone No.: (415) 318-1160  
Fax No.: (415) 693-0194

**ASSIGNEE CERTIFICATION UNDER 37 CFR 3.73(B)**

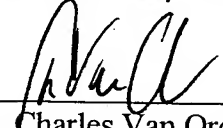
The undersigned representative of the above-identified assignee certifies that the above-identified assignee is the assignee of an interest in the above-identified patent application by virtue of a chain of title from one of the inventors of the above-identified patent application to the above-identified assignee as shown below:

From: Jeffrey W. Lutze, Jian Chen, and Yan Li To SanDisk Corporation for which a copy thereof is attached.

The undersigned (whose title is supplied below) is empowered to sign this certificate on behalf of the above-identified assignee.

September 10, 2003

Date

  
Name: Charles Van Orden

Title: Vice President and General Counsel

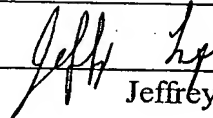
## ASSIGNMENT

For good and valuable consideration, receipt of which is hereby acknowledged, we, Jeffrey W. Lutze of San Jose, CA, Jian Chen of San Jose, CA, and Yan Li of Milpitas, CA, hereby sell, assign and transfer to SanDisk Corporation, a Delaware corporation, having a place of business at 140 Caspian Court, Sunnyvale, California, 94089, its successors and assigns, the entire right, title and interest throughout the world in our invention in:

### METHODS FOR IDENTIFYING NON-VOLATILE MEMORY ELEMENTS WITH POOR SUBTHRESHOLD SLOPE OR WEAK TRANSCONDUCTANCE

for which we have executed a United States patent application on or about the date of this assignment, and all patent applications and patents of every country for said invention, including divisions, reissues, continuations and extensions thereof, and all rights of priority resulting from the filing of said applications; we authorize the above-named assignee to apply for patents of foreign countries for said invention, and to claim all rights of priority without further authorization from us; we agree to execute all papers useful in connection with said United States and foreign applications, and generally to do everything possible to aid said assignee, their successors, assigns and nominees, at their request and expense, in obtaining and enforcing patents for said invention in all countries; and we request that the United States Patent and Trademark Office issue all patents granted for said invention to the above-named assignee, its successors and assigns.

Executed this 19 day of August, 2003.



Jeffrey W. Lutze

State of \_\_\_\_\_ )

) ss

County of \_\_\_\_\_ )

On \_\_\_\_\_ before me, \_\_\_\_\_ personally appeared \_\_\_\_\_ personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is(are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

\_\_\_\_\_  
SIGNATURE OF NOTARY

Executed this 21<sup>st</sup> day of August, 2003.

[Signature]  
Jian Chen

State of \_\_\_\_\_ )

County of \_\_\_\_\_ ) ss

On \_\_\_\_\_ before me, \_\_\_\_\_  
personally appeared \_\_\_\_\_ personally known to  
me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s)  
is(are) subscribed to the within instrument and acknowledged to me that he/she/they executed the  
same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the  
instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the  
instrument.

WITNESS my hand and official seal.

\_\_\_\_\_  
SIGNATURE OF NOTARY

Executed this 21 day of August, 2003.

[Signature]  
Yan Li

State of \_\_\_\_\_ )

County of \_\_\_\_\_ ) ss

On \_\_\_\_\_ before me, \_\_\_\_\_  
personally appeared \_\_\_\_\_ personally known to  
me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s)  
is(are) subscribed to the within instrument and acknowledged to me that he/she/they executed the  
same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the  
instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the  
instrument.

WITNESS my hand and official seal.

\_\_\_\_\_  
SIGNATURE OF NOTARY

RECORDATION FORM COVER SHEET  
PATENTS ONLYU.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE

TO THE HONORABLE DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE. PLEASE RECORD THE ATTACHED ORIGINAL DOCUMENTS OR COPY THEREOF.

## 1. Name of conveying party(ies):

- (a) Kazunori Kanabako
- 
- (b) Tomoharu Tanaka

Additional name(s) of conveying party(ies) attached?

☐ Yes ☒ No

## 2. Name and address of receiving party(ies):

Name: Kabushiki Kaisha Toshiba  
1-1, Shibaura 1-chome, Minato-ku  
Tokyo  
JAPAN

## 3. Nature of Conveyance:

- ☒
- Assignment
- ☐
- Merger
- 
- ☐
- Security Agreement
- ☐
- Change of Name
- 
- ☐
- Other

Execution Date: (a) 9/01/03 (b) 8/25/03

## Name and address of receiving party(ies):

Name:  
Street Address:  
City: State: Zip:  
Country:  
Additional name(s) & address(es) attached?  
☐ Yes ☒ No

## 4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: 9/01/03, 8/25/03

## A. Patent Application No.(s) -

Title:

## B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

## 5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Michael G. Cleveland  
Internal Address: Parsons Hsue & de Runtz LLP  
Street Address: 655 Montgomery Street, Suite 1800  
City San Francisco State CA Zip 94111

## 6. Total number of applications and patents involved: 1

## 7. Total fee (37 CFR 3.41): \$40.00

- ☒
- A check is enclosed that includes the total fee.
- 
- ☒
- Charge Deposit Account 502664 for any additional fees required for this conveyance and credit deposit account 502664 any amounts overpaid

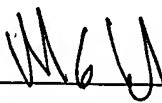
DO NOT USE THIS SPACE

## 8. Statement and signature.

*To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.*

Michael G. Cleveland, Reg. No.: 46,030

Name of Person Signing



Signature

Sept 17 2003

Date

Total number of pages including cover sheet, attachments, and documents: 3

## ASSIGNMENT

For good and valuable consideration, receipt of which is hereby acknowledged, we, Kazunori Kanebako of Yokohama, Japan and Tomoharu Tanaka, of Yokohama, Japan, hereby sell, assign and transfer to Kabushiki Kaisha Toshiba, a Japanese corporation, having a place of business at 1-1, Shibaura 1-chome, Minato-ku, Tokyo, Japan, its successors and assigns, the entire right, title and interest throughout the world in our invention in:

### METHODS FOR IDENTIFYING NON-VOLATILE MEMORY ELEMENTS WITH POOR SUBTHRESHOLD SLOPE OR WEAK TRANSCONDUCTANCE

for which we have executed a United States patent application on or about the date of this assignment, and all patent applications and patents of every country for said invention, including divisions, reissues, continuations and extensions thereof, and all rights of priority resulting from the filing of said applications; we authorize the above-named assignee to apply for patents of foreign countries for said invention, and to claim all rights of priority without further authorization from us; we agree to execute all papers useful in connection with said United States and foreign applications, and generally to do everything possible to aid said assignee, their successors, assigns and nominees, at their request and expense, in obtaining and enforcing patents for said invention in all countries; and we request that the United States Patent and Trademark Office issue all patents granted for said invention to the above-named assignee, its successors and assigns.

Executed this 1 day of Sept, 2003.

Kazunori Kanebako

Kazunori Kanebako

State of )

County of ) ss

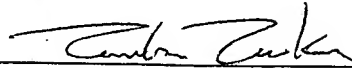
County of )

On \_\_\_\_\_ before me, \_\_\_\_\_ personally appeared \_\_\_\_\_ personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is(are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

\_\_\_\_\_  
SIGNATURE OF NOTARY

Executed this 25 day of August, 2003.



Tomoharu Tanaka

State of \_\_\_\_\_ )

County of \_\_\_\_\_ ) ss

On \_\_\_\_\_ before me, \_\_\_\_\_  
personally appeared \_\_\_\_\_ personally known to  
me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s)  
is(are) subscribed to the within instrument and acknowledged to me that he/she/they executed the  
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## 1. Name of conveying party(ies):

- (a) Jeffrey W. Lutze  
(b) Jian Chen  
(c) Yan Li

Additional name(s) of conveying party(ies) attached?

☐ Yes ☒ No

## 2. Name and address of receiving party(ies):

Name: SanDisk Corporation  
140 Caspian Court  
Sunnyvale, CA94089  
U.S.A.

## 3. Nature of Conveyance:

- ☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
☐ Other

Execution Date: (a) 8/19/03 (b) 8/21/03 (c) 8/21/03

## Name and address of receiving party(ies):

Name:  
Street Address:  
City: State: Zip:  
Country:  
Additional name(s) & address(es) attached?  
☐ Yes ☒ No

## 4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: 8/19/03, 8/21/03, 8/21/03

## A. Patent Application No.(s) -

Title:

## B. Patent No.(s)

Additional numbers attached?

☐ Yes ☒ No

## 5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Michael G. ClevelandInternal Address: Parsons Hsue & de Runtz LLPStreet Address: 655 Montgomery Street, Suite 1800City: San Francisco State: CA Zip: 941116. Total number of applications and patents involved: 1

## 7. Total fee (37 CFR 3.41): \$40.00

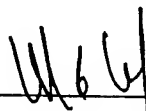
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☒ Charge Deposit Account 502664 for any additional fees required for this conveyance and credit deposit account 502664 any amounts overpaid

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Michael G. Cleveland, Reg. No.: 46,030  
Name of Person Signing



Signature

Sep 17, 2003  
Date

Total number of pages including cover sheet, attachments, and documents: 3

RECEIVED

MAY 03 2004

Parsons Hsue & de Runtz LLP



UNITED STATES PATENT AND TRADEMARK OFFICE

UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND  
DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

APRIL 29, 2004

PTAS



\*102567792A\*

PARSONS HSUE & DE RUNTZ LLP  
MICHAEL G. CLEVELAND  
655 MONTGOMERY STREET  
SUITE 1800  
SAN FRANCISCO, CA 94111

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE, YOU MAY PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 09/17/2003

REEL/FRAME: 014542/0082

NUMBER OF PAGES: 8

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

LUTZ, JEFFREY W.

DOC DATE: 08/19/2003

ASSIGNOR:

CHEN, JIAN

DOC DATE: 08/21/2003

ASSIGNOR:

LI, YAN

DOC DATE: 08/21/2003

ASSIGNEE:

SANDISK CORPORATION  
140 CASPIAN COURT  
SUNNYVALE, CALIFORNIA 94089

SERIAL NUMBER: 10665685

FILING DATE: 09/17/2003

PATENT NUMBER:

ISSUE DATE:

014542/0082 PAGE 2

DIANE RUSSELE, PARALEGAL  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS